

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (currently amended) A method for manufacturing a magnetic memory device comprising the steps of:

forming a first wiring on a substrate;

forming a magnetoresistance effect type memory element which comprises a tunnel insulating layer disposed between a ferromagnetic material and which is electrically insulated from the first wiring;

forming an insulating film for covering the memory element; and

forming ~~a second wiring~~ second wirings so that ~~it is~~ they are buried in the insulating film wherein one of the second ~~wiring~~ wirings is electrically connected to the magnetoresistive effect type memory element and spatially crosses the first wiring through the magnetoresistive effect type memory element disposed therebetween, wherein said method further comprises the steps of:

removing the insulating film on ~~a side portion~~ side portions of the second ~~wiring~~ wirings to expose the second wirings ~~wiring~~; and

forming a soft magnetic material layer selectively on a side surface and a top surface of each of the second wirings ~~wiring~~, but not as a continuous layer from one of the second wirings to an adjacent one wiring to another of the second wirings wiring.

2. (original) The method for manufacturing a magnetic memory device as cited in claim 1, wherein:

said magnetic memory device is a nonvolatile magnetic memory device.

3. (original) The method for manufacturing a magnetic memory device as cited in claim 1, wherein:

said soft magnetic material layer is formed by an electroless plating process.

4. (currently amended) The method for manufacturing a magnetic memory device as cited in claim 1, wherein:

said insulating film on the side ~~portion~~ portions of the second ~~wiring~~ wirings comprises an etching stopper layer and an interlayer insulating layer formed on the etching stopper layer;

and

etching is once stopped when removing said interlayer insulating layer at step for removing the insulating film on the side ~~portion~~ portions of the second ~~wiring~~ wirings to expose the second wirings ~~wiring~~.

5. (currently amended) The method for manufacturing a magnetic memory device as cited in claim 1, wherein:

said second wirings ~~are~~ wiring is formed in trenches ~~formed in a trench~~ ~~formed on~~ said insulating film via barrier layers ~~a barrier layer~~; and

said barrier layers ~~layer~~ on the side portions ~~portion~~ of the second wirings ~~are~~ wiring is removed after said insulating film is removed and before said soft magnetic material layer is formed.

6. (currently amended) The method for manufacturing a magnetic memory device as cited in claim 1, wherein:

said second wirings ~~are~~ wiring is formed in trenches ~~in a trench~~ ~~formed on~~ said insulating film via barrier layers ~~a barrier layer~~; said method for manufacturing a magnetic memory device further comprises ~~a~~ the step of forming a mask pattern between said second wirings after said insulating film is removed and before said soft magnetic material layer is formed; and

said step for forming the soft magnetic material layer on the side surface and the top surface of each of the second wirings ~~wiring~~ comprises ~~the~~ steps of:

forming the soft magnetic material layer selectively on the side surface and the top surface of each of the second wirings ~~wiring~~ while using said mask pattern as a mask; and

removing said mask pattern after that.

7. (currently amended) The method for manufacturing a magnetic memory device as cited in claim 1, wherein:

said second wirings ~~are~~ wiring is formed in trenches ~~in a trench~~ ~~formed on~~ said insulating film via barrier layers ~~a barrier layer~~; said method for manufacturing a magnetic memory device further comprises, after said insulating film is removed and before said soft magnetic material layer is formed, ~~the~~ steps of:

removing said barrier layer on the side portion of the second wiring; and
forming a mask pattern between said second wirings; and

said step for forming the soft magnetic material layer on the side surface and the top surface of each of the second wirings ~~wiring~~ comprises the steps of:

forming the soft magnetic material layer selectively on the side surface and the top surface of each of the second wirings ~~wiring~~ while using said mask pattern as a mask; and removing said mask pattern after that.

8-20. (canceled).